



Board Meeting

November 9, 2017
Counce, Tennessee



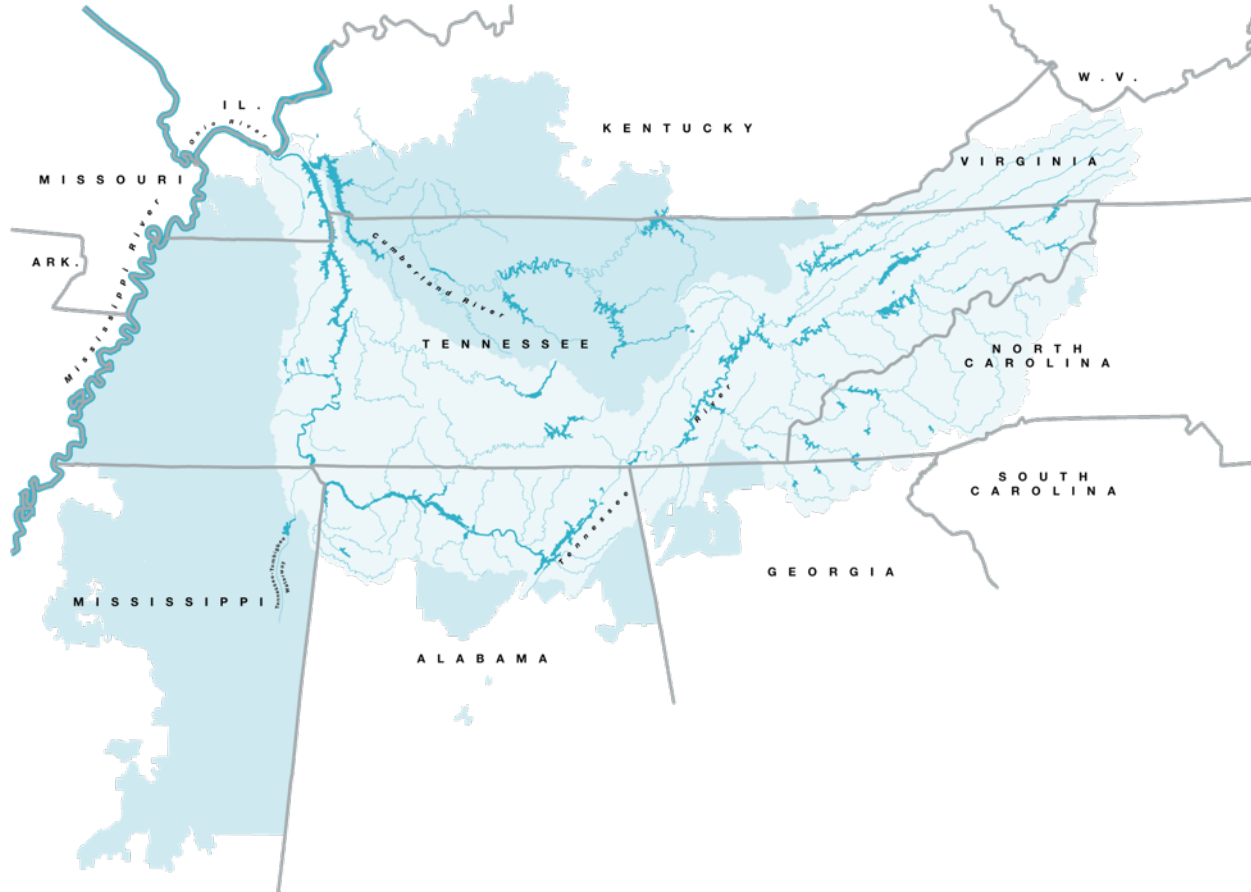
President's Report

BILL JOHNSON
President and CEO

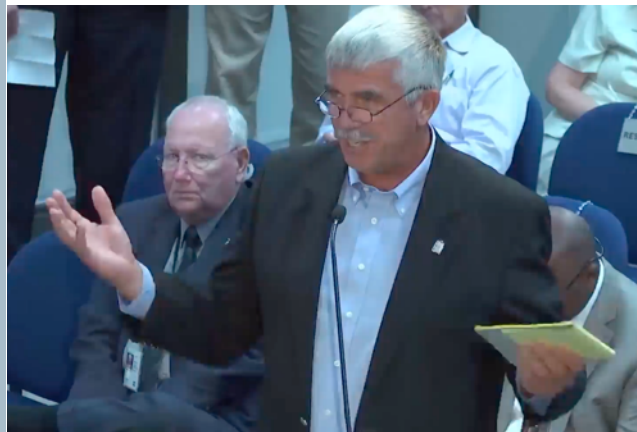
Thank You, Customers



Customer Service Area



Tennessee Valley Farmers



Pickwick Landing



PICKWICK

PICKWICK

Construction: 1934-1938

Dam Height: 113 feet

Dam Length: 7,715 feet

Shoreline: 496 miles

Surface Area: 42,700 acres

Generating Units: 6

Capacity: 238 MW

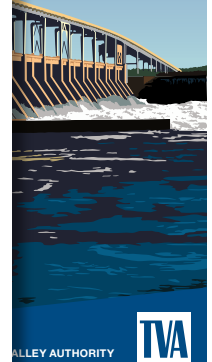


Pickwick Lake, located in western Tennessee, is popular for boating and water skiing. Pickwick Dam Campground, located below the dam, includes 92 sites with utilities (five are accessible) and eight tent sites without utilities.

Pickwick Lake has excellent sport-fishing areas, including the Wilson Dam tailwater at the upper end of the lake, noted for record-size smallmouth bass and catfish.

#TVAfun ■ [tva.com](https://www.tva.com)

[facebook.com/TVA](https://www.facebook.com/TVA) [@TVAnews](https://twitter.com/TVAnews) [@TVA](https://www.instagram.com/TVA)



Mission to Serve

Energy

Delivering affordable,
reliable power

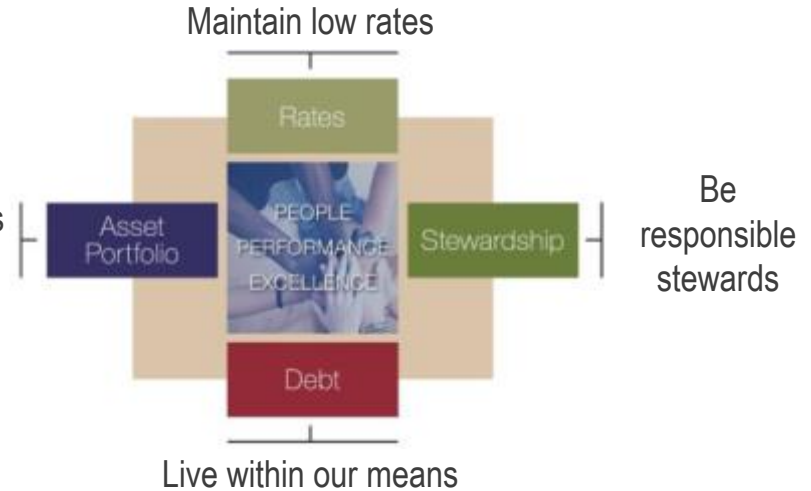
Environment

Caring for our region's
natural resources

Economic Development

Creating sustainable
economic growth

Meet
reliability
expectations
& provide a
balanced
portfolio



“They have to earn that respect. They have to earn it by serving people.”

Myles Horton, Hardin County native and civil rights activist



Exceeding Expectations

Long-Term Plan

ON TRACK

Improve Operational Performance

Diversify Our Energy Mix

Improve TVA's Financial Health

Reduce Debt

Lower Power Rates

Reduced Operating Expenses by

\$800 Million

\$2 Billion in Capital Investments

ON TRACK TO

REDUCE **\$22 BILLION**
DEBT BY 2023

Energy | Environment | Economic Development



Transmission



Energy



Nuclear - Watts Bar Unit 2



Paradise



Under Budget

220

Million Dollars

Gallatin



Clean Air
Equipment

Allen



Combined
Cycle Units

Allen Solar

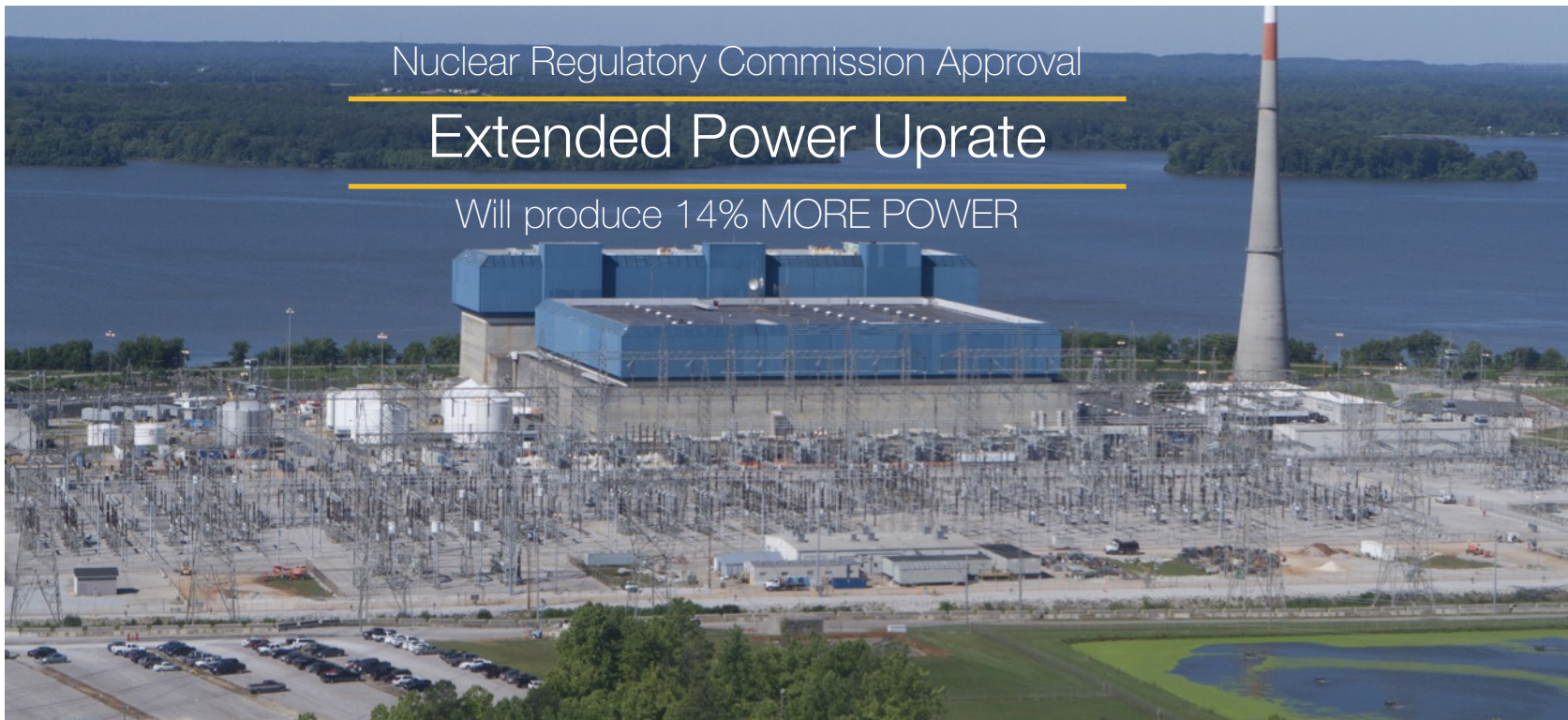


Browns Ferry Nuclear Plant

Nuclear Regulatory Commission Approval

Extended Power Uprate

Will produce 14% MORE POWER



Air Quality is the

Best

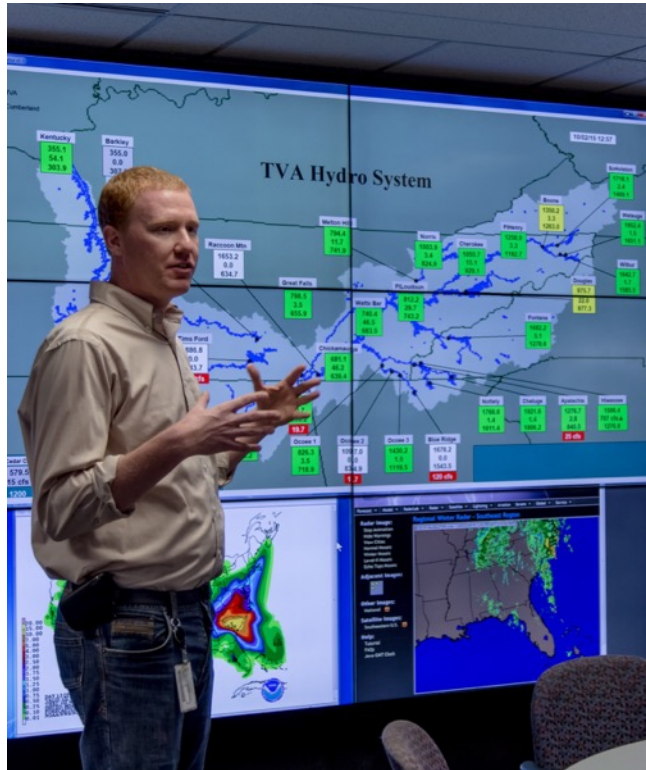
In Our Lifetime



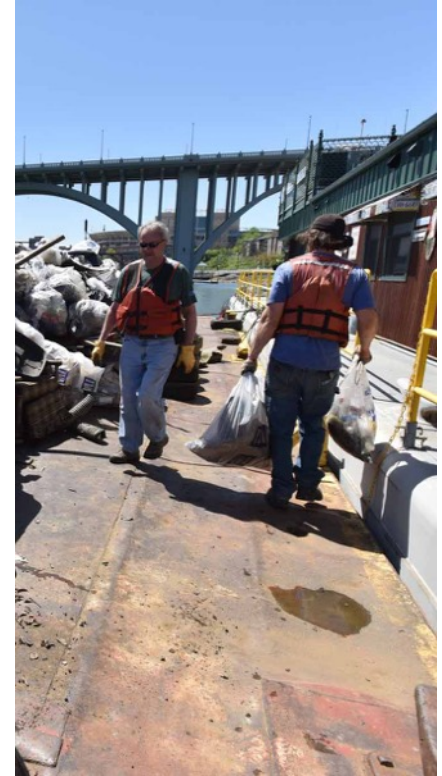
Energy | **Environment** | Economic Development



River Forecast Center



Volunteer Activities



Energy | Environment | **Economic Development**



Economic Development Accomplishments

70,000 JOBS

Attracted or Retained

RESULTING IN

\$8.3billion

Capital Investment

SITE SELECTION MAGAZINE
12th year in a row

TVA NAMED America's

TOP 10 UTILITIES

for economic development

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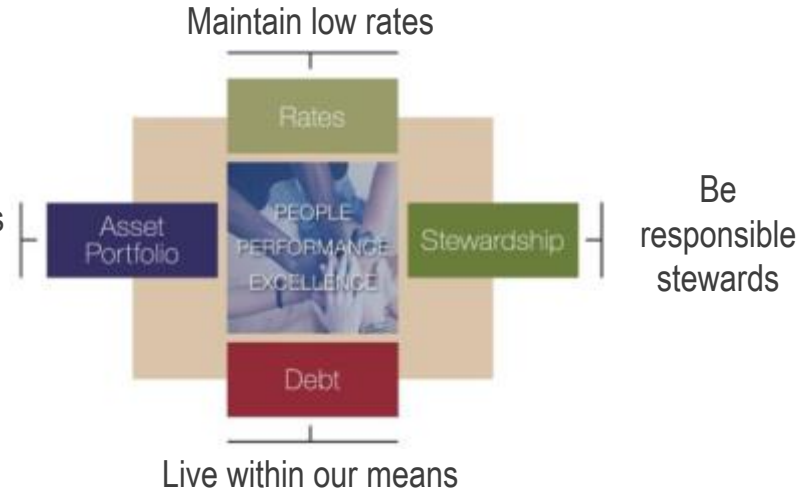
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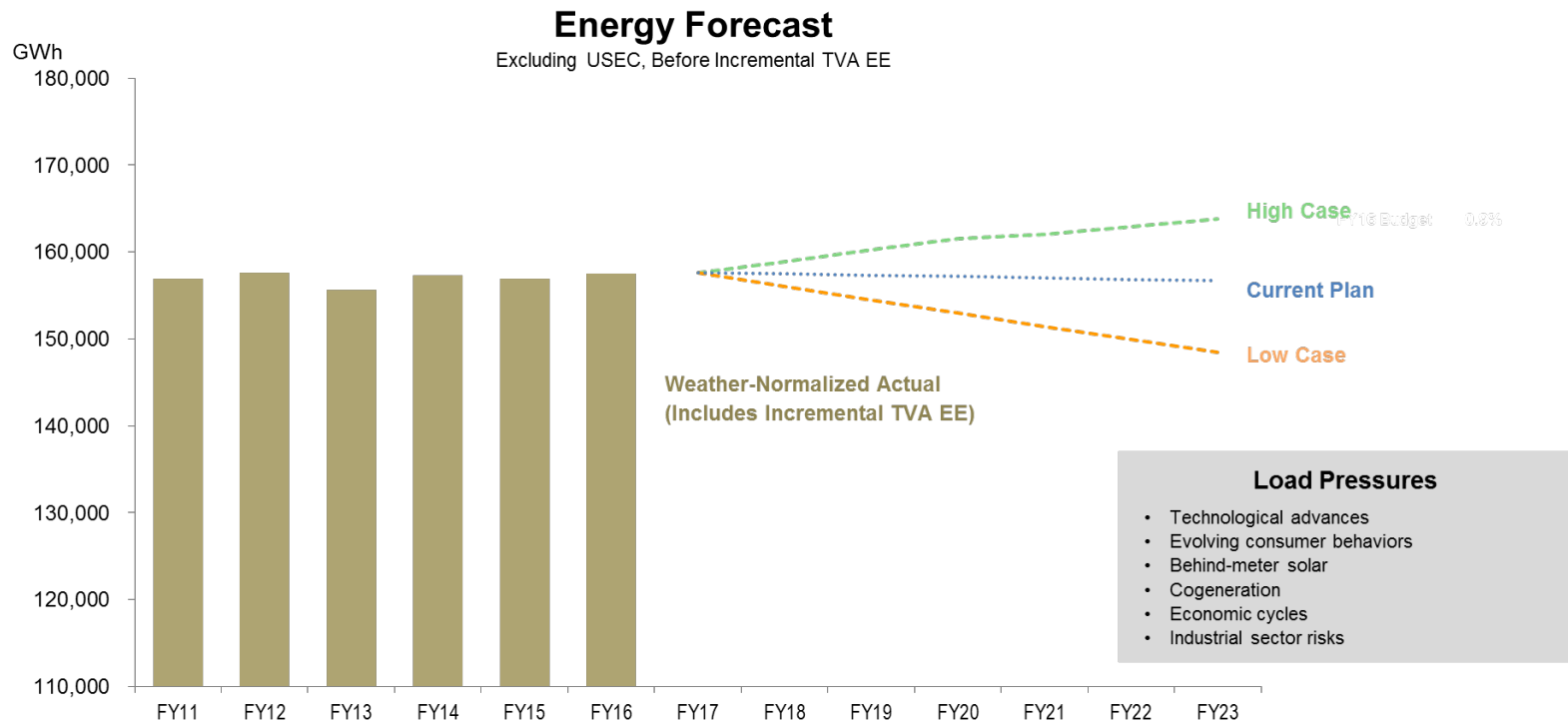
Meet
reliability
expectations
& provide a
balanced
portfolio



Continuing Performance Goals



Load Growth Chart



Mission to Serve

Energy

Delivering affordable, reliable power

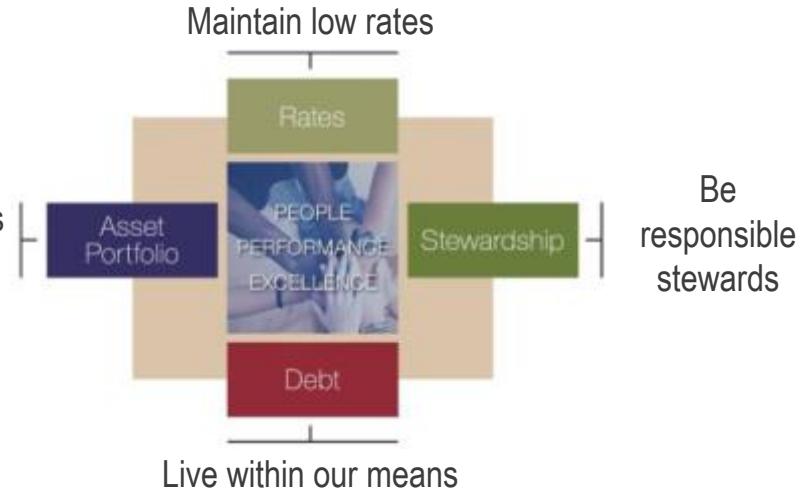
Environment

Caring for our region's natural resources

Economic Development

Creating sustainable economic growth

Meet reliability expectations & provide a balanced portfolio



ACROSS THE REGION IN 2017, TVA & EMPLOYEES:

WORKED WITH:

49 RURAL FOOD
PANTRIES

PROVIDING:

2.3million
MEALS to families
in need

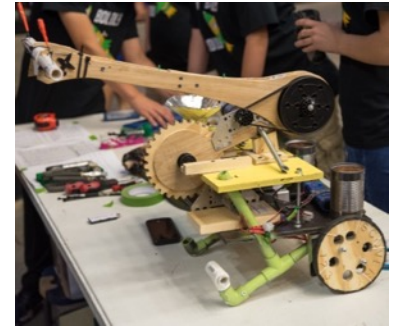
HELPED:

10,000 STUDENTS
Gain Experience & Encourage Interest in
ROBOTICS & STEM

ENGAGED:

500 & **25** in the
STUDENTS COLLEGES **TVA**
Investment Challenge Program

STEM Education



Visitor Centers





Employees

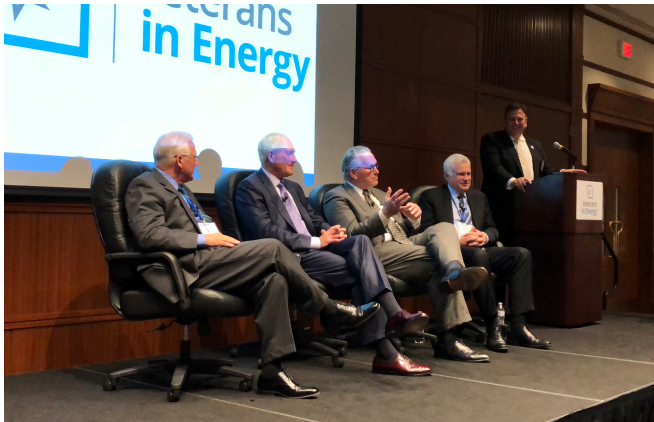


Mission to Serve





Veterans in Energy





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Finance, Rates, and Portfolio Committee



Financial Performance Update

JOHN THOMAS

Executive Vice President
and Chief Financial Officer



Fiscal Year 2017

Net Income: \$685M

- \$48M more than budget and \$548M below last year

Operating Revenues: \$369M above budget

- Higher demand and fuel revenue

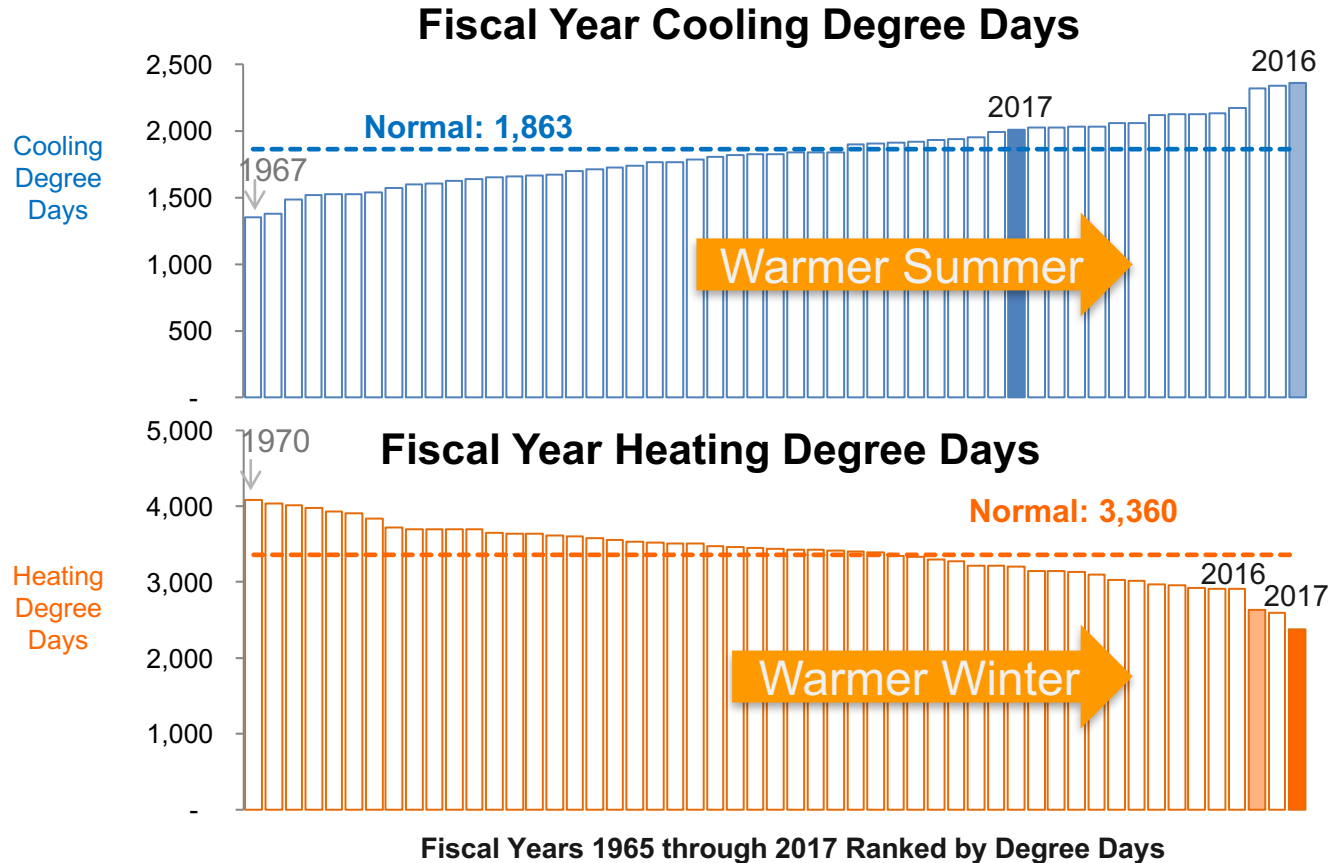
Operating & Maintenance Expenses (O&M): \$396M unfavorable to budget

- One-time \$500M extra pension contribution; partially offset by favorable Business Unit O&M

Interest Expense: \$80M favorable to budget

- Lower debt rates and less reliance on debt
- Total Financing Obligations (TFO): \$922M less than budget

FY17 Warmer than Normal



Summary Income Statement

\$48M favorable due to operating revenue and lower routine expenses

\$ million	FY 2017			FY 2016	
	Actual	Budget	Variance Fav/(Unfav)	Actual	'17 v '16 Fav/(Unfav)
Operating Revenue	\$ 10,739	\$ 10,370	\$ 369	\$ 10,616	\$ 123
Fuel & Purchased Power	3,160	3,008	(152)	3,090	(70)
Total Operating & Maintenance	3,362	2,966	(396)	2,842	(520)
Pension Cost / Contributions	800	300	(500)	275	(525)
Outage O&M	248	246	(2)	190	(58)
O&M excl. Pension & Outage	2,314	2,420	106	2,377	63
Taxes, Depreciation, Other	2,186	2,333	147	2,315	129
Interest	1,346	1,426	80	1,136	(210)
Net Income (Loss)	\$ 685	\$ 637	\$ 48	\$ 1,233	\$ (548)

Summary Cash Flow Statement

TFOs were \$922M favorable to budget, reflecting \$554M of favorability FY 2017

\$ million	FY 2017			FY 2016	
	Actual	Budget	Variance	Actual	'17 v '16
Cash Flow from Operating Activities	\$ 2,736	\$ 2,499	\$ 237	\$ 3,042	\$ (306)
Cash Flow used in Investing Activities	(2,536)	(2,941)	405	(3,113)	577
Cash Flow from Financing Activities	(200)	442	(642)	71	(271)
Net Change in Cash & Cash Equivalents	-	-	-	-	-
Ending Cash & Short-Term Investments	300	300	-	300	-
Ending Debt and Financing Obligations	\$ 26,022	\$ 26,944	\$ 922	\$ 26,207	\$ 185

FY17 Summary (Results v. Plan)

Higher Demand Sales – warmer weather drove favorable peak demand revenue

Increased Fuel Revenues/Costs – higher gas prices and increased coal and gas generation

Lower Expenses – depreciation and interest

Lower Debt Balance – favorable cash flows resulting in less debt

A background image showing a close-up of two people in business attire. One person is holding a pen over a document, and the other is holding a tablet. The image is slightly blurred, focusing on the hands and the objects they are holding.

Long Term Service Agreement for Lagoon Creek Combined Cycle Plant

DAVID SORRICK
Senior Vice President

For Board Consideration

Approval to execute a Long Term Service Agreement between TVA and Mitsubishi Hitachi Power Systems Americas, Inc., the original equipment manufacturer, for TVA's Lagoon Creek Combined Cycle site

Term

The expected term, based on TVA's generation plan is 17 years. Should TVA operate the facility sufficiently less than the current generation plan, the agreement will reach end of term at 21 years.



Background

- Long Term Service Agreements are industry standard practice
- Low gas prices and operational flexibility are driving significant reliance on combined cycle fleet generation
- Significant maintenance for the combined cycle facility will be required to ensure long term reliability of the assets
- Multiple options, including competitive solicitations, were evaluated in reaching the recommendation
- Approval would be subject to a contract ceiling of \$90 million

Recommendation

Approval to execute a Long Term Service Agreement between TVA and Mitsubishi Hitachi Power Systems Americas, Inc., the original equipment manufacturer, for TVA's Lagoon Creek Combined Cycle site



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Large and Medium Power Transformers

Mike Skaggs

Executive Vice President,
Operations

Purpose

- Need for large and for medium power transformers
- Recommended suppliers identified
- Contractual terms developed



Contracts Overview

- Base term of 5 years
- Authority to add or remove suppliers
- Total spend not to exceed \$400 million
- No minimum amount of work is guaranteed



Recommendation

Authorize the execution of long-term contracts, including contracts with ABB Inc., and Siemens Industry, Inc., for large power transformers, and with ABB and SPX Transformer Solutions, Inc., for medium power transformers, including related equipment and services



Finance, Rates, and Portfolio Committee





People and Performance Committee





Audit, Risk, and Regulation Committee





Nuclear Oversight Committee



External Relations Committee





1953 - BUILT FOR THE PEOPLE OF THE UNITED NATIONS



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